

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-27. (Canceled)

28. (New) A method of preparing a thermal and/or acoustic insulation material based on dried precipitated silica, comprising the steps:

(A) filtering an aqueous dispersion D containing precipitated silica particles in a filter press, whereby a compacted filter cake is obtained; and then

(B) drying the filter cake in the compacted state as obtained after step (A).

29. (New) The method as defined by Claim 28, wherein the filtering in the filter press of step (A) includes a compacting operation at a pressure ranging from 2 to 10 bar.

30. (New) The method as defined by Claim 28, wherein step (A) comprises:

(A1) a filtration operation at moderate pressure; and then

(A2) a compacting operation carried out on the filter cake obtained at a pressure ranging from 2 to 10 bar.

31. (New) The method as defined by Claim 28, wherein the compacted filter cake obtained after step (A) has a solids content of from 10 to 35% by weight.

32. (New) The method as defined by Claim 28, wherein the aqueous dispersion D in step (A) contains a precipitated silica which, once dried, has a BET specific surface area of from 80 to 400 m²/g and a CTAB specific surface area of from 80 to 350 m²/g.

33. (New) The method as defined by Claim 28, wherein the aqueous dispersion D in step (A) further comprises a reinforcing filler.

34. (New) The method as defined by Claim 33, said reinforcing filler comprising reinforcing fibers selected from the group consisting of aluminum silicate fibers, alumina fibers, mineral wool fibers, glass fibers, quartz fibers, ceramic fibers, polymer fibers and cellulose fibers.

35. (New) The method as defined by Claim 33, wherein the (silica/reinforcing filler) mass ratio within the aqueous dispersion D ranges from 75/25 to 99/1 by weight.

36. (New) The method as defined by Claim 28, wherein the aqueous dispersion D in step (A) further comprises an opacifying agent capable of reflecting, absorbing and/or dispersing at least part of the infrared radiation.

37. (New) The method as defined by Claim 36, wherein the opacifying agent is selected from the group consisting of chromium oxide, zirconium oxide, iron oxide, titanium dioxide, manganese dioxide, ilmenite, quartz powder, silicon carbide, boron carbide, tantalum carbide, carbon black and graphite.

38. (New) The method as defined by Claim 36, wherein the (silica/opacifying agent) mass ratio ranges from 50/50 to 99/1 within the aqueous dispersion D.

39. (New) The method as defined by Claim 28, wherein step (B) is carried out by allowing the compacted filter cake obtained after step (A) to dry at a temperature of from 10 to 30°C.

40. (New) The method as defined by Claim 28, wherein step (B) is carried out by subjecting the compacted filter cake as obtained after step (A) to a progressive temperature increase from room temperature up to a temperature of at least 100°C, at a rate of temperature increase of less than 2°C per minute, optionally with the temperature being held at one, two or more intermediate temperature levels.

41. (New) A porous thermal and/or acoustic insulation material based on dried precipitated silica prepared by the method of Claim 28.

42. (New) The insulation material as defined by Claim 41, shaped as a panel of rectangular or square shape.

43. (New) The insulation material as defined by Claim 41, in which the pore volume of the pores smaller in size than 1,000 nm constitutes at least 40% of the total pore volume of the material.

44. (New) The insulation material as defined by Claim 43, in which the pore volume of the pores smaller in size than 100 nm constitutes at least 50% of the pore volume of the pores smaller in size than 1000 nm.

45. (New) The insulation material as defined by Claim 41, having a total pore volume of from 1 to 5 cm³/g.

46. (New) The insulation material as defined by Claim 41, having a pore volume of pores smaller in size than 100 nm of at least 1 cm³/g.

47. (New) A thermal and/or acoustic insulation material based on dried precipitated silica, which further comprises a reinforcing filler, prepared by the method as defined by Claim 33.

48. (New) The insulation material as defined by Claim 47, comprising:
from 75 to 99% by weight of dry silica; and
from 1 to 25% by weight of reinforcing filler.

49. (New) A thermal and/or acoustic insulation material based on dried precipitated silica, which further comprises an opacifying agent, prepared by the method as defined by Claim 36.

50. (New) The insulation material as defined by Claim 49, comprising:
from 50 to 90% by weight of dry silica;
from 9 to 50% by weight of opacifying agent; and
from 0 to 15% by weight of reinforcing filler.

51. (New) A thermal or acoustic insulation panel comprising the insulation material as defined by Claim 41.

52. (New) A thermal and acoustic insulation material for walls or ceilings of buildings or dwellings, or for a fire-retardant material, comprising the insulation material as defined by Claim 41.

53. (New) A high temperature insulation material for insulating an enclosure heated to high temperature, or as constituent material of a fire-retardant barrier, comprising the insulation material as defined by Claim 41.

54. (New) A porous thermal and/or acoustic insulation material comprising dried precipitated silica and having a total pore volume of from 1 to 15 cm³/g.